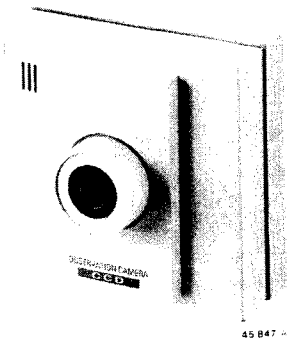
B/W CCD Observation Camera VCM8120

/00T/01T

VC81205R

Service
Service
Service



Service Manual

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INTRODUCTION

This CCD Observation Camera is a black and white videocamera with a built-in electret microphone, a fixed focus lens and an RF output in TV band I (channel 3 or 4).
It is designed to work in a system with maximum 6 cameras together with a special B/W monitor.
The operating power for the camera is supplied via the coaxial cable.

The camera is suitable for limited outdoor use.
It is backwards compatible with both vidicon camera VK4902 and CCD camera CCD806/812.

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TECHNICAL DATA

Supply voltage	: 9.8 - 16 Volts DC
Supply current operation	: 100 mA at 12 V. DC
stand-by	: <10 mA at 4 V. DC
Warming up time	: < 0.8 sec.
Ambient temperature	: -20°C to +55°C.
Relative humidity	: 20% - 90%
Pick-up element	: 1/3" Interline CCD VCM8120/00T/01T: LZ2324 VC81205R : LZ2314
Number of pixels	: LZ2324 : 512(H) x 582(V) LZ2314 : 512(H) x 492(V)
Horizontal resolution	: >340 TV lines in the centre
Illumination range	: 1 to 25000 Lux.
Signal to noise ratio	: >48 dB (illum.level >100 lux).
Modulated RF output	: Channel 3 or 4 (selectable)
Modulator system	: VCM8120/00T CCIR-B VCM8120/01T CCIR-I VC81205R EIA
Microphone	: built-in electret
Lens	: fixed 3.65 mm F2.0
Focusability	: fixed 1m-infinity
Tripod fixation	: 1/4" BSW.
Dimensions	: 70(W) x 70(H) x 54(D)

WARNINGS

1. NEVER measure directly at the output of the CCD image sensor. It will destroy the sensor immediately. Always measure behind buffer 7196.

2. Safety regulations require that the set is resored to its original condition and that components identical to the original types be used.

3.

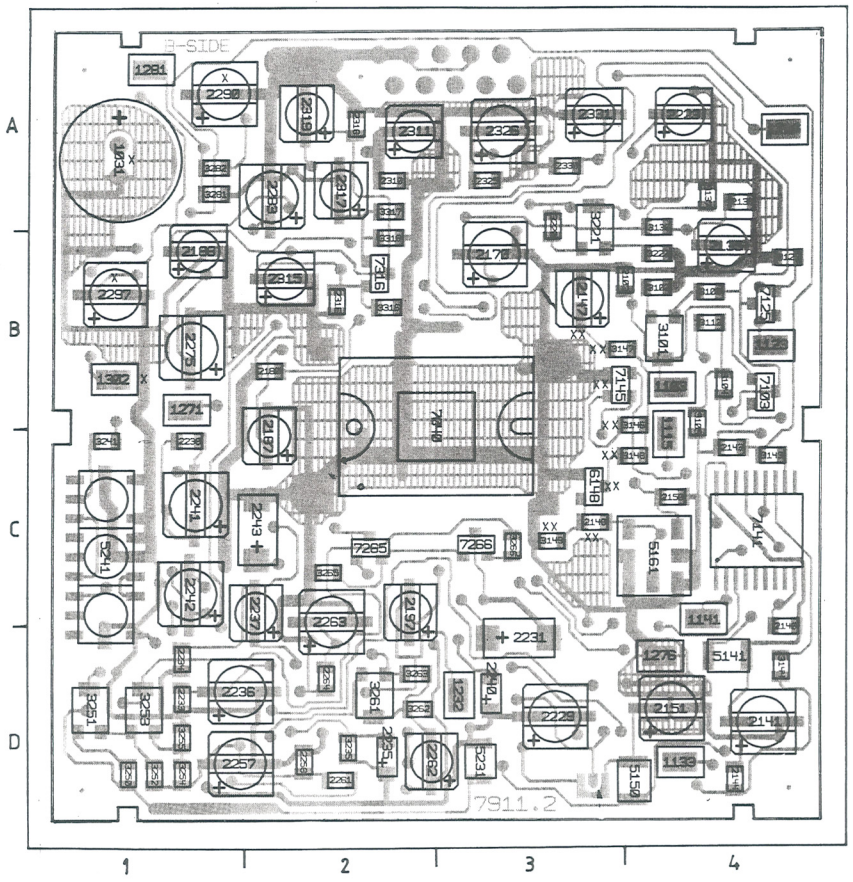
   All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can destroy them or reduce their lifetime drasticaly. When repairing, make sure that you are connected to the same potential as the mass of the set. Also keep tools at that potential.

4. Always switch the set off before replacing any of the components or separating the PCboards.

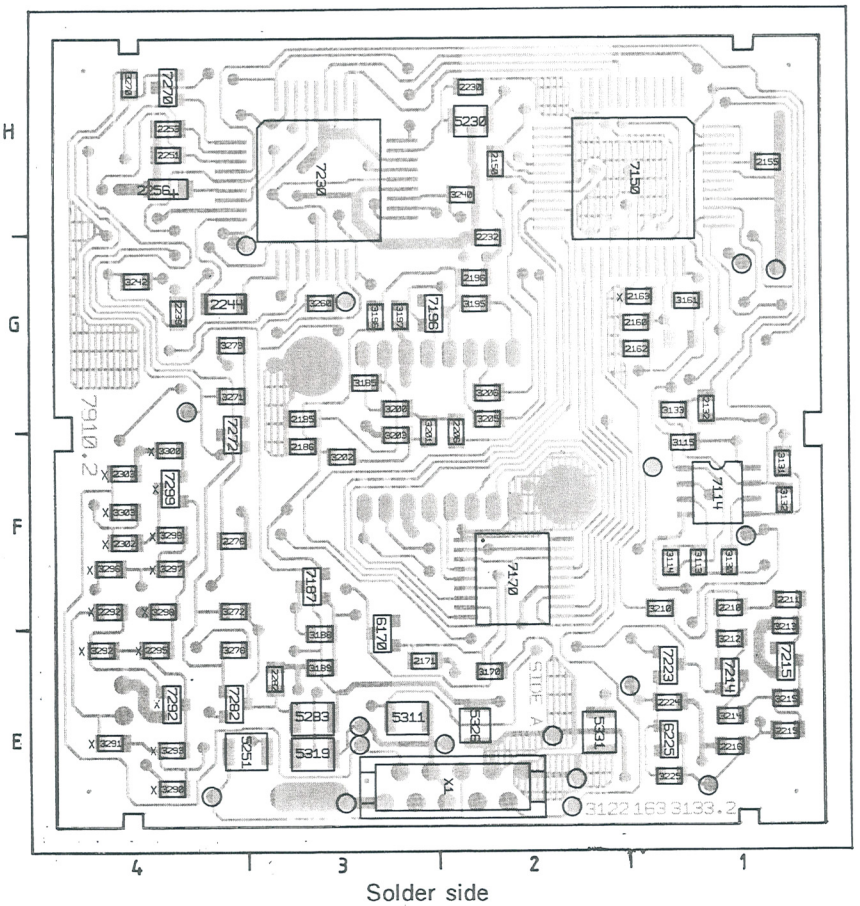
REMARKS

1. The values of resistors and capacitors are given without decimal point. e.g.3k9. Please read 3.9k.

WIRING DIAGRAM PROCESSING PANEL



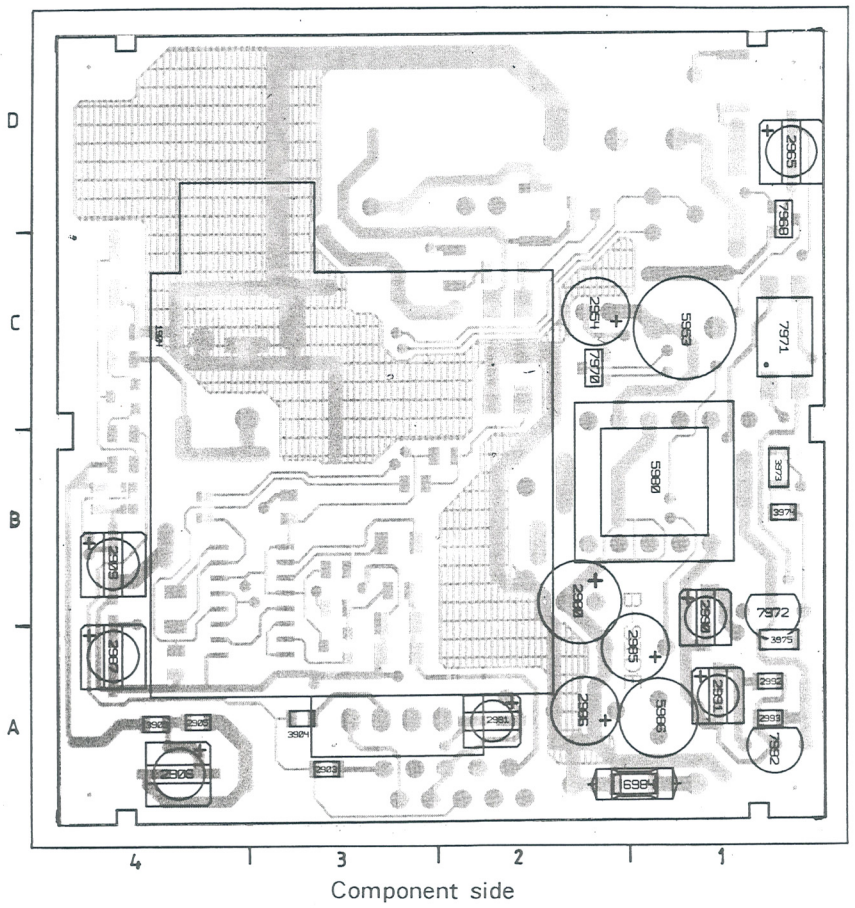
Component side



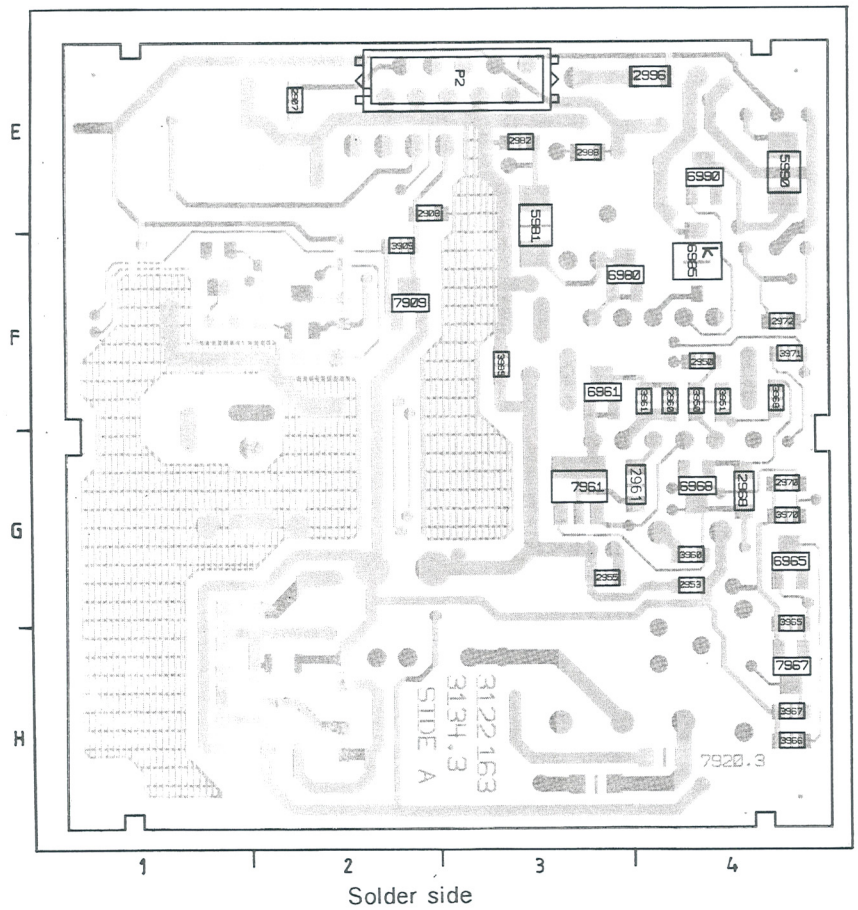
Solder side

NOTE: This lay-out is applicable for both VCM81 & VCM61.
Thus, some components mentioned **may not** be present on the panels

1031	A1	3136	B4
1103	B4	3137	A4
1115	C4	3143	C4
1123	B4	3144	D4
1133	D4	3145	B3
1141	C4	3146	C4
1216	A4	3147	B3
1232	D3	3149	C3
1271	B1	3161	G1
1276	D4	3170	E2
1281	A1	3185	G3
1302	B1	3188	E3
2102	B3	3189	E3
2132	G1	3195	G2
2135	B4	3196	G3
2136	A4	3197	G3
2140	C4	3200	G3
2141	D4	3201	G3
2143	C4	3202	F3
2144	D4	3203	F3
2147	B3	3205	G2
2148	C3	3206	G2
2150	H2	3210	F1
2151	D4	3212	E1
2155	H1	3213	F1
2156	C4	3214	E1
2160	G2	3215	E1
2162	G2	3220	A3
2163	G2	3221	A3
2170	A3	3222	B4
2171	E3	3225	E1
2180	B2	3235	D2
2185	G3	3240	H2
2186	F3	3241	C1
2187	B2	3250	D1
2188	A1	3251	D1
2196	G2	3252	D1
2197	C2	3253	D1
2206	F2	3254	D1
2210	F1	3255	D1
2211	F1	3260	G3
2215	E1	3261	D2
2216	E1	3262	D2
2223	A4	3263	D2
2224	E1	3265	C2
2229	D3	3266	C3
2230	H2	3270	H4
2231	D3	3271	G4
2232	G2	3272	F4
2233	D1	3273	G4
2234	D1	3276	E4
2235	D2	3281	A1
2236	D1	3282	A1
2237	C2	3290	E4
2238	C1	3291	E4
2239	G4	3292	E4
2240	D3	3293	E4
2241	C1	3296	F4
2242	C1	3297	F4
2243	C1	3298	F4
2244	G4	3299	F4
2251	H4	3300	F4
2253	H4	3303	F4
2256	H4	3316	B2
2257	D1	3317	A2
2258	D2	3318	B2
2261	D2	5141	D4
2262	D2	5150	D4
2263	C2	5161	C4
2264	D2	5230	H2
2275	B1	5231	D3
2276	F4	5241	C1
2282	E3	5251	E1
2283	A2	5283	E3
2290	A1	5311	E3
2292	F4	5319	E3
2295	E4	5326	E2
2297	B1	5331	E2
2302	F4	6148	C3
2303	F4	6170	E3
2310	A2	6225	E1
2311	A2	7040	C2
2315	B2	7103	B4
2316	B2	7114	F1
2317	A2	7125	B4
2318	A2	7141	C4
2319	A2	7145	B4
2325	A3	7150	H1
2326	A3	7170	F2
2330	A3	7187	F3
2331	A3	7196	G2
3100	B4	7214	E1
3101	B4	7215	E1
3102	B4	7223	E1
3104	B4	7230	H3
3105	B4	7265	C2
3112	B4	7266	C3
3113	F1	7270	H4
3114	F1	7272	F4
3115	F1	7282	E4
3123	F1	7292	E4
3124	F1	7299	F4
3125	B4	7316	B2
3130	F1		
3131	F1		
3132	F1		
3133	G1		



Component side



Solder side

NOTE: 7972 and 7992 have to be bent away.

1904 C2
2903 A3
2905 A4
2906 A4
2907 E2
2908 E2
2909 B4
2950 F4
2953 G4
2954 C2
2955 G3
2960 F4
2961 G3
2965 D1
2968 G4
2970 G4
2972 F4
2980 A2
2981 A2
2982 E3
2985 A1
2986 A2
2987 A4
2988 E3
2990 A1
2991 A1
2992 A1
2993 A1
2996 E4
3904 A3
3905 A4
3950 F4
3951 F4
3960 G4
3961 F3
3965 G4
3966 H4
3967 H4
3968 F4
3970 G4
3971 F4
3973 B1
3974 B1
3975 A1
3995 F3
5953 C1
5980 C1
5981 E3
5986 A1
5990 E4
6961 F3
6965 G4
6968 G4
6980 F3
6985 F4
6990 E4
7909 F2
7961 G3
7967 G4
7968 C1
7970 C1
7971 C1
7972 B1
7992 A1

PROCESSING PANEL

*: NOT IN VCM 81..

CIRCUIT DIAGRAM

*: NOT IN VCM 81..

PROCESSING PANEL

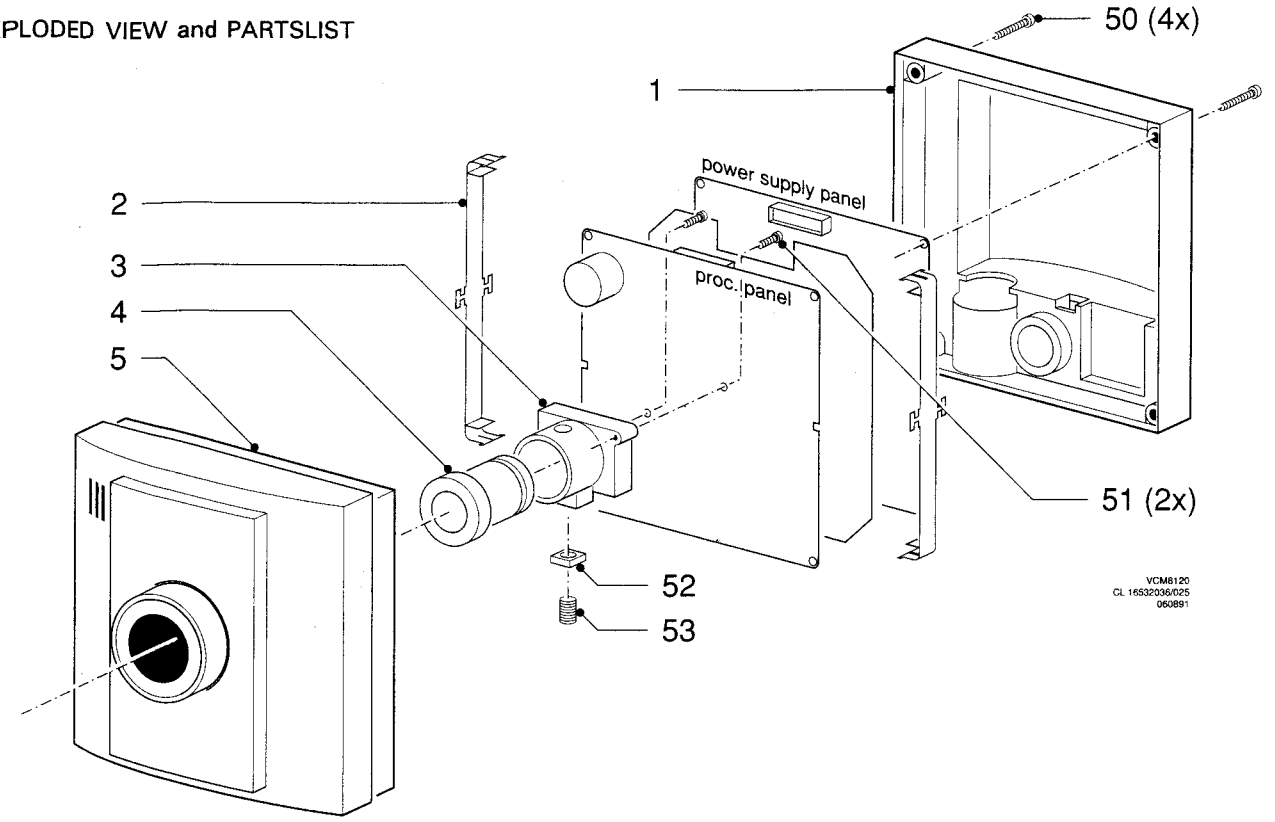
SUPPLY PANEL

VCM 81..

CI36532017/011.AREF
200193

1031	I24	3114	F14	6984	L23
1904	C29	3115	F15	6985	K23
2102	I11	3125	G12	6990	M23
2132	F15	3130	I13	7040	B 4
2135	G11	3131	I13	7103	I12
2136	G11	3132	H14	7114	G14
2140	N 3	3133	I15	7114	I14
2141	N 4	3136	G11	7125	F12
2143	D26	3137	G10	7141	K 7
2144	M 9	3142	N 4	7145	L 2
2147	M 3	3143	D26	7150	G16
2148	K 4	3144	M 8	7150	H 4
2150	H 2	3146	L 2	7170	F 4
2151	H 3	3147	L 3	7187	L15
2155	J 9	3148	L 3	7196	C 7
2158	K 3	3149	L 4	7214	F18
2160	K 3	3161	J 3	7215	G19
2162	K 2	3170	F 7	7223	H18
2163	K 3	3185	C 3	7230	B 9
2170	F 7	3188	L16	7230	B18
2171	F 7	3189	M16	7230	A20
2180	C 3	3195	B 7	7265	G22
2185	C 3	3196	B 7	7266	G23
2186	M15	3197	D 7	7270	C24
2187	M15	3200	D 7	7272	C25
2188	M16	3201	D 8	7282	C26
2196	C 8	3202	C 7	7292	J25
2197	C 7	3203	C 8	7299	H26
2206	D 8	3205	D 7	7316	K15
2210	F18	3206	E 7	7909	J29
2211	G18	3210	F17	7961	J24
2215	F19	3212	F18	7967	O27
2216	G20	3213	G18	7968	N27
2223	I19	3214	F19	7970	N25
2224	I19	3215	G19	7971	N25
2229	N19	3220	H18	7972	N21
2230	B 9	3221	H18	7992	M21
2231	N19	3222	I18		
2232	N18	3225	H20		
2233	B11	3235	A13		
2234	C15	3240	A12		
2235	B13	3241	C15		
2236	B10	3242	C18		
2237	B15	3250	E24		
2238	D14	3251	E24		
2239	C18	3252	F25		
2240	B13	3253	F24		
2241	C14	3254	F25		
2242	B18	3255	F24		
2243	C19	3260	A21		
2244	B19	3261	A23		
2251	F24	3262	A25		
2253	G24	3263	A22		
2256	D21	3265	G22		
2257	E20	3266	F23		
2258	E20	3270	D24		
2261	B23	3271	D24		
2262	B24	3272	B25		
2263	G22	3273	D25		
2264	G21	3276	C26		
2275	D25	3281	C27		
2276	D26	3282	C27		
2282	C27	3290	G24		
2283	C28	3291	H24		
2290	H24	3292	H25		
2292	I24	3293	H25		
2295	H25	3296	G26		
2297	H26	3297	H26		
2302	H27	3298	I26		
2303	H28	3299	H26		
2310	J19	3300	I26		
2311	J19	3303	H27		
2315	L14	3316	K15		
2316	L15	3317	K16		
2317	L16	3318	K16		
2318	K19	3904	C29		
2319	K19	3905	A30		
2325	L19	3909	J29		
2326	L19	3950	M24		
2330	M19	3951	L24		
2331	M19	3960	J25		
2903	C28	3961	J24		
2905	B30	3965	O27		
2906	B29	3966	N27		
2907	H29	3967	N27		
2908	J30	3968	L25		
2909	K29	3970	O25		
2950	M24	3971	N23		
2953	J27	3973	N20		
2954	J26	3974	N20		
2955	J25	3975	O20		
2960	J24	3995	I29		
2961	K24	5141	M 4		
2965	O28	5150	H 3		
2968	K25	5161	K 3		
2970	O24	5230	A 9		
2972	N22	5231	N19		
2980	J22	5241	C15		
2981	J22	5251	C27		
2982	J21	5283	B28		
2985	L22	5311	J19		
2986	L22	5319	K19		
2987	L21	5326	L19		
2988	L21	5331	L19		
2990	M23	5953	J26		
2991	M22	5980	J24		
2992	M22	5981	J22		
2993	M21	5986	K22		
2996	M20	5990	M22		
3100	H11	6148	L 4		
3101	I11	6170	F 7		
3102	I11	6225	H20		
3104	I12	6961	J24		
3105	J12	6965	N27		
3112	G13	6968	K25		
3113	G13	6980	J23		

EXPLODED VIEW and PARTSLIST



	4822 462 10507	Tripod assy /00/01T
	4822 462 10516	Tripod assy /05R
	4822 502 21314	Screw for tripod
	4822 505 10665	Lock nut M5
	4822 321 61405	Coax conn. cable
	4822 264 10233	Male coax plug
	4822 267 31424	Fem. coax socket
	4822 736 52646	DFU /00T/01T
	4822 736 52817	DFU /05R
	4822 310 32045	Extension board
	4822 395 50426	Trimming tool SMD
1	4822 432 60621	Housing back /00T/01T
1	4822 432 60678	Housing back /05R
2	4822 466 93052	Spacer
3	4822 256 80074	Lens Holder
4	4822 381 11291	Lens 3.6 mm
5	4822 432 60619	Housing front /00T/01T
5	4822 432 60681	Housing front /05R
50	4822 502 13887	Torx screw 2x20
51	4822 502 13886	Torx screw 2x5
52	4822 505 10635	Square nut
53	4822 502 10176	Screw M3x5

Various

1020	4822 212 30438	Proc. PCB assy 00/01T
1020	4822 212 30439	Proc. PCB assy 05R
1021	4822 214 33474	Power board /00T
1021	4822 214 33536	Power board /01T
1021	4822 214 33475	Power board /05R
1031	4822 242 30176	Microphone
1035	4822 212 10232	Proc. panel
1103	4822 404 60717	Test clip chip
1115	4822 404 60717	Test clip chip
1123	4822 404 60717	Test clip chip
1133	4822 404 60717	Test clip chip
1141	4822 404 60717	Test clip chip
1216	4822 404 60717	Test clip chip
1232	4822 404 60717	Test clip chip
1271	4822 404 60717	Test clip chip
1276	4822 404 60717	Test clip chip
1281	4822 404 60717	Test clip chip
1302	4822 404 60717	Test clip chip
X1	5322 265 40903	Connector 10p
P2	4822 265 41281	Connector 10p

Modulator

1904	4822 214 33469	Modulator /00T
1904	4822 214 33535	Modulator /01T
1904	4822 214 33468	Modulator /05R

Capacitors

2102	4822 126 10002	100nF 20% 25V
2132	4822 126 10002	100nF 20% 25V
2135	4822 124 23982	10µF 20% 25V
2136	4822 126 10002	100nF 20% 25V
2140	4822 126 10002	100nF +80/-20%
2141	4822 124 23981	47µF 20% 6.3V
2143	5322 122 32448	10pF 5% 50V
2144	5322 122 32531	100pF 5% 50V
2150	4822 126 10002	100nF 20% 25V
2151	4822 124 23981	47µF 20% 6.3V
2155	5322 122 34123	1nF 10% 50V
2158	5322 122 32659	33pF 5% 50V
2160	5322 122 32448	10pF 5% 50V
2162	4822 122 33981	22pF 5%
2163	5322 122 32448	10pF 5% 50V
2170	4822 124 23981	47µF 20% 6.3V
2171	4822 126 10002	100nF 20% 25V
2180	4822 126 10002	100nF 20% 25V
2185	4822 126 10002	100nF 20% 25V
2186	4822 126 10002	100nF 20% 25V
2187	4822 124 23982	10µF 20% 25V
2188	4822 124 23982	10µF 20% 25V
2196	4822 126 10002	100nF 20% 25V
2197	4822 124 23982	10µF 20% 25V
2206	5322 122 34123	1nF 10% 50V
2210	5322 122 34123	1nF 10% 50V
2211	5322 122 34123	1nF 10% 50V
2215	4822 126 10002	100nF 20% 25V
2216	5322 122 34123	1nF 10% 50V
2223	4822 124 23982	10µF 20% 25V
2224	4822 126 10002	100nF 20% 25V
2229	4822 124 23981	47µF 20% 6.3V
2230	4822 126 10002	100nF 20% 25V
2231	4822 126 11216	22µF 20% 6.3V
2232	4822 126 10002	100nF 20% 25V
2233	4822 126 10002	100nF 20% 25V
2234	4822 126 10002	100nF 20% 25V
2235	4822 126 11219	1µF 20% 16V
2236	4822 124 23981	47µF 20% 6.3V
2237	4822 124 23982	10µF 20% 25V
2238	4822 126 10002	100nF 20% 25V
2239	4822 126 10002	100nF 20% 25V
2240	4822 126 11219	1µF 20% 16V
2241	4822 124 23981	47µF 20% 6.3V
2242	4822 124 23981	47µF 20% 6.3V
2243	4822 126 11216	22µF 20% 6.3V
2244	4822 122 33496	100nF 10% 63V
2251	4822 126 10002	100nF 20% 25V
2253	4822 126 10002	100nF 20% 25V
2256	4822 126 11219	1µF 20% 16V
2257	4822 124 23981	47µF 20% 6.3V
2258	4822 126 10002	100nF 20% 25V
2261	4822 126 10002	100nF 20% 25V
2262	4822 124 23982	10µF 20% 25V
2263	4822 124 23981	47µF 20% 6.3V
2264	4822 126 10002	100nF 20% 25V
2275	4822 124 23981	47µF 20% 6.3V
2276	4822 126 10002	100nF 20% 25V
2282	4822 126 10002	100nF 20% 25V
2283	4822 124 23981	47µF 20% 6.3V
2290	4822 124 23981	47µF 20% 6.3V
2292	4822 126 10002	100nF 20% 25V
2295	4822 126 10002	100nF 20% 25V

2297 4822 124 23981 47µF 20% 6.3V
2302 4822 126 10002 100nF 20% 25V

2303 5322 122 34123 1nF 10% 50V
2310 4822 126 10002 100nF 20% 25V
2311 4822 124 23982 10µF 20% 25V
2315 4822 124 23982 10µF 20% 25V
2316 4822 126 10002 100nF 20% 25V

2317 4822 124 23982 10µF 20% 25V
2318 4822 126 10002 100nF 20% 25V
2319 4822 124 23982 10µF 20% 25V
2325 4822 126 10002 100nF 20% 25V
2326 4822 124 23981 47µF 20% 6.3V

2330 4822 126 10002 100nF 20% 25V
2331 4822 124 23982 10µF 20% 25V
2903 5322 122 33538 150pF 5% NPO
2905 4822 126 10002 100nF +80/-20%
2906 4822 124 23981 47µF 20% 6.3V

2907 4822 122 33127 2n2 10% x7R
2908 4822 126 10002 100nF +80/-20%
2909 4822 124 23982 10µF 20% 25V
2950 5322 122 34098 10nF 10% X7R
2953 4822 126 10002 100nF +80/-20%

2954 4822 124 40433 470µF 25V
2955 4822 126 10002 100nF +80/-20%
2960 4822 126 10002 100nF +80/-20%
2961 4822 122 32507 6.8pF 5% 50V
2965 4822 124 23981 47µF 20% 6.3V

2968 4822 122 32891 68nF 10%
2970 4822 122 33128 15nF 10% X7R
2972 5322 122 34098 10nF 10% X7R
2980 4822 124 23979 1.5µF 20% 25V
2981 4822 124 23982 10µF 20% 25V

2982 4822 126 10002 100nF +80/-20%
2985 4822 124 23795 33µF 10% 6.3V
2986 4822 124 23795 33µF 10% 6.3V
2987 4822 124 23981 47µF 20% 6.3V
2988 4822 126 10002 100nF +80/-20%

2990 4822 124 23982 10µF 25V
2991 4822 124 23982 10µF 25V
2992 4822 126 10002 100nF +80/-20%
2993 4822 126 10002 100nF +80/-20%
2996 4822 122 33496 100nF 63V

Resistor

3100 4822 051 20223 22k 5% 0,1W
3101 4822 100 11663 10k
3102 4822 051 20183 18k 5% 0,1W
3104 4822 051 20689 68Ω 5% 0,1W
3105 4822 051 20102 1k 5% 0,1W

3112 4822 051 20103 10k 5% 0,1W
3113 4822 051 20103 10k 5% 0,1W
3114 4822 051 20105 1M 5% 0,1W
3115 4822 051 20223 22k 5% 0,1W
3124 4822 111 91536

3125 4822 051 20102 1k 5% 0,1W
3130 4822 051 20103 10k 5% 0,1W
3131 4822 051 20103 10k 5% 0,1W
3132 4822 051 20105 1M 5% 0,1W
3133 4822 051 20223 22k 5% 0,1W

3136 4822 051 20472 4k7 5% 0,1W
3137 4822 051 20472 4k7 5% 0,1W
3143 4822 051 20102 1k 5% 0,1W
3144 4822 051 20102 1k 5% 0,1W
3155 4822 111 91536

3161 4822 051 20331 330Ω 5% 0,1W
3170 4822 051 20471 470Ω 5% 0,1W
3185 4822 051 20332 3k3 5% 0,1W
3188 4822 116 83479 6k 65 1%
3189 4822 116 83481 16k 5

3195 4822 051 20339 33Ω 5% 0,1W
3196 4822 051 20339 33Ω 5% 0,1W
3197 4822 051 20472 4k7 5% 0,1W
3200 4822 051 20339 33Ω 5% 0,1W
3201 4822 051 20472 4k7 5% 0,1W
3202 4822 051 20223 22k 5% 0,1W

3203 4822 051 20103 10k 5% 0,1W
3205 4822 051 20339 33Ω 5% 0,1W
3206 4822 051 20339 33Ω 5% 0,1W
3210 4822 051 20331 330Ω 5% 0,1W
3212 4822 051 20102 1k 5% 0,1W

3213 4822 051 20102 1k 5% 0,1W
3214 4822 051 20339 33Ω 5% 0,1W
3215 4822 051 20339 33Ω 5% 0,1W
3220 4822 051 20182 1k8 5% 0,1W
3221 4822 100 11663 10k potm.

3222 4822 051 20472 4k7 5% 0,1W
3225 4822 051 20104 100k 5% 0,1W
3235 4822 051 20224 220k 5% 0,1W
3240 4822 051 20564 560k 5% 0,1W
3241 4822 051 20821 820Ω 5% 0,1W

3242 4822 051 20122 1k2 5% 0,1W
3250 4822 051 20332 3k3 5% 0,1W
3251 4822 100 11663 10k potm.
3252 4822 051 20102 1k 5% 0,1W
3253 4822 100 11663 10k potm.

3254 4822 051 20182 1k8 5% 0,1W
3255 4822 051 20103 10k 5% 0,1W
3260 4822 051 20472 4k7 5% 0,1W
3261 4822 100 11663 10k potm.
3262 4822 051 20104 100k 5% 0,1W

3263 4822 051 20332 3k3 5% 0,1W
3265 4822 051 20102 1k 5% 0,1W
3266 4822 051 20333 33k 5% 0,1W
3270 4822 051 20471 470Ω 5% 0,1W
3271 4822 116 83482 115Ω 1%

3272 4822 116 83483 681Ω 1%
3273 4822 051 20471 470Ω 5% 0,1W
3276 4822 051 20332 3k3 5% 0,1W
3281 4822 051 20102 1k 5% 0,1W
3282 4822 051 20221 220Ω 5% 0,1W

3290 4822 051 20331 330Ω 5% 0,1W
3291 4822 051 20182 1k8 5% 0,1W
3292 4822 051 20105 1M 5% 0,1W
3293 4822 051 20472 4k7 5% 0,1W
3296 4822 051 20331 330Ω 5% 0,1W

3297 4822 051 20683 68k 5% 0,1W
3298 4822 051 20333 33k 5% 0,1W
3299 4822 051 20122 1k2 5% 0,1W
3300 4822 051 20331 330Ω 5% 0,1W
3303 4822 051 20472 4k7 5% 0,1W

3316 4822 051 20333 33k 5% 0,1W
3317 4822 051 20822 8k2 5% 0,1W
3318 4822 051 20333 33k 5% 0,1W
3904 4822 051 10102 1k 2% 0,25W
3905 4822 051 20109 10Ω 5%

3909 4822 051 20272 2k7 5%
3950 4822 051 20152 1k5 5%
3951 4822 051 20181 180 5%
3960 4822 051 20153 15k 5%
3961 4822 051 20103 10k 5%

3965 4822 051 20103 10k 5%
3966 4822 051 20103 10k 5%
3967 4822 051 20103 10k 5%
3968 4822 051 20181 180Ω 5%
3970 4822 051 20471 470Ω 5%

3971 4822 051 20681 680Ω 5%
3973 4822 051 54642 4k64 1%
3974 4822 051 20221 220Ω 5%
3975 4822 051 54642 4k64 1%
3995 4822 051 20008 0R

Coils

5141 5322 157 63043 47µH 10%
5150 5322 157 63043 47µH 10%
5161 4822 156 21648 2.2µH 19.3mH z
5230 4822 526 10548 Bead
5231 4822 526 10548 Bead

5241 4822 157 63636 4FT 9.6MHz
5251 4822 157 63635 Coil
5283 5322 157 63043 47µH 10%
5311 5322 157 63043 47µH 10%
5319 5322 157 63043 47µH 10%

5326 4822 526 10548 Bead
5331 5322 157 63043 47µH 10%
5953 4822 157 63347 470µH
5980 4822 148 81212 Transformer
5981 5322 157 63043 47µH 10%

5986 4822 157 51904 100µH
5990 5322 157 63043 47µH 10%

Diode

6170 5322 130 31928 BAS16
6225 5322 130 31928 BAS16
6961 5322 130 31928 BAS16
6965 4822 130 80125 BZX84-C5V6
6968 5322 130 31928 BAS16

6980 5322 130 31928 BAS16
6984 5322 130 32962 BZV85-C6V2
6985 4822 130 81125 MA701A
6990 5322 130 31928 BAS16

Transistor & I.C.'s

7040 4822 209 31329 LZ2314Z /05R
7040 4822 209 31331 LZ2324Z /00T/01T
7103 5322 130 41982 BC848B
7114 4822 209 31205 LM293D
7125 5322 130 41982 BC848B

7141 4822 209 30637 LZ93B53
7150 4822 209 30636 LZ93F31
7170 4822 209 30635 LR36683N
7187 5322 130 41982 BC848B
7196 4822 130 42353 BFS19

7214 5322 130 60503 BSR15
7215 4822 130 62908 BSR13
7223 5322 130 41982 BC848B
7230 4822 209 30638 IR3P69
7265 5322 130 41982 BC848B

7266 5322 130 41983 BC858B
7270 5322 130 41982 BC848B
7272 5322 130 41982 BC848B
7282 5322 130 41982 BC848B
7292 5322 130 41982 BC848B

7299 5322 130 41982 BC848B
7316 5322 130 41982 BC848B
7909 4822 130 42615 BC817-40
7961 5322 130 61817 BCX56-16
7967 5322 130 41982 BC848B

7968 5322 130 41982 BC848B
7970 4822 130 42615 BC817-40
7971 4822 130 82847 PC817I
7972 5322 209 62029 TL431ILP
7992 4822 209 30639 MC78L08ABP